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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,947	08/03/2001	Michel Andre Crepeau	PM 01038 (5500*86)	8375
23416	7590	05/04/2005	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ, LLP			MITCHELL, GREGORY W	
P O BOX 2207			ART UNIT	
WILMINGTON, DE 19899			PAPER NUMBER	
			1617	
DATE MAILED: 05/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/921,947

Applicant(s)

CREPEAU, MICHEL ANDRE

Examiner

Gregory W. Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 58-113 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 58-113 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

*HL*

### **DETAILED ACTION**

This Office Action is in response to the Remarks filed January 27, 2005. Claims 58-113 are pending and are examined herein.

#### ***Response to Arguments***

Applicant's arguments, filed January 27, 2005, with respect to the rejection(s) of claim(s) 58-113 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made, as set forth below.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 58-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirk (USPN 4966779) in view of each of Parfitt (*Martindale*, 32<sup>nd</sup> ed., pp. 1358-1359, 1366-1370), Winstrom et al. (USPN 3708583) and Pomp (USPN 5935918).

Kirk teaches water miscible emulsified formulations for use as nutritional additives to food products (col. 1, lines 7-13). The composition is taught to comprise 5-55% of a vitamin component, 3-30% of an oil component, 0.5-10% of a modified lecithin (nonionic emulsifier), 3.5-12% of sorbitan fatty acid ester (nonionic emulsifier), 5-30%

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water, and 0.5-10% propylene glycol (col. 1, lines 25-43; col. 4, lines 12-16). Vitamins A, D, E and K are taught as useful in the invention (col. 2, lines 10-14). Preservatives are optional components of the composition (col. 4, lines 23-27). Kirk does not specifically teach the preferred preservatives, an alkyl lactate, the preferred vitamins or the preferred concentrations.

Parfitt teaches that Vitamin A is known in the art to consist of either retinol or its esters, including the propionate (p. 1358, col. 1). Parfitt also teaches that Vitamin E is known in the art to include dl-Alpha tocopheryl acetate (p. 1369, col. 1-2).

Winstrom et al. teaches a vitamin additive for addition to animal feeds (col. 1, lines 4-5). The additive is taught to comprise vitamins A, D<sub>2</sub>, D<sub>3</sub>, and E (col. 2, lines 5-8). Vitamin A compounds useful in the invention are selected from Vitamin A palmitate and Vitamin A acetate (Vitamin A precursors) (col. 3, lines 1-42). Winstrom et al. also teaches the use of antioxidants to prevent biological deterioration and degradation of the vitamins (col. 6, lines 5-7). Ethoxyquin is taught to be a preferred agent for protecting the vitamins from deterioration and degradation (col. 6, lines 8-26). Ethoxyquin is exemplified as comprising 1.5% of an additive composition (col. 8, lines 30-45). Other preservatives are also taught to be useful, e.g., BHT, BHA, sorbic acid (fungicide), etc. (col. 6, lines 26-31). The composition is further taught to comprise flavoring agents to improve the esthetic qualities of the additive (col. 6, lines 32-35).

Pomp teaches that butyl lactate is an FDA approved flavor additive (col. 3, lines 60-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the specific vitamins are as herein claimed because (1) Kirk teaches the use of Vitamins A, D and E in general; (2) Winstrom et al. specifically teaches Vitamin D<sub>3</sub> as a vitamin D compound useful in feed additives; and (3) Parfitt teaches the vitamin compounds, instantly claimed as vitamin precursors, as known in the art to be useful as A and E vitamins. One would have been motivated to utilize the specific vitamins as instantly claimed because of an expectation of success in preparing a nutritional feed additive, as taught by Kirk.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add a butyl lactate to the feed additive of Kirk because (1) Kirk and Winstrom et al. are both directed to food additive compositions; (2) Winstrom et al. teaches that it is known in the art to add flavoring agents to food additive composition for esthetic qualities; and (3) Pomp teaches that butyl lactate is known in the art to be a flavoring agent. One would have been motivated to add butyl lactate to the composition of Kirk because of an expectation of success in preparing a food additive with improved esthetic properties, as taught by Winstrom et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the preservatives ethoxyquin and sorbic acid to the composition of Kirk because (1) Kirk and Winstrom are both directed to food additive compositions; (2) Kirk teaches the addition of preservatives, in general, to the composition; (3) Winstrom et al. teaches that ethoxyquin is a preferred agent for protecting the vitamins from deterioration and degradation; (4) Winstrom et al. teaches that sorbic acid is a

preservative optionally added to the composition. One would have been motivated to add the preservatives of Winstrom et al. to the composition of Kirk et al. because of an expectation of success in preserving the composition in general, as taught by Kirk, and preparing a food additive composition wherein the vitamins are protected from deterioration and degradation, as taught by Winstrom et al.

It is noted that it would have been obvious to one of ordinary skill in the art to substitute the butyl lactate of the combined references with propyl lactate because adjacent homologs are considered to be obvious absent a showing of unexpected results. *In re Hass*, 141 F.2d 127, 60 USPQ 548 (CCPA 1944); *In re Henze*, 85 USPQ 261, 263 (CCPA 1950).

It would have been obvious to one of ordinary skill in the art to prepare a composition with the concentrations as instantly claimed because the claimed concentrations overlap with those as taught by the combined references. It is well established that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

It is further noted that the flashpoint, viscosity and dispersibility of the additive are physical properties thereof. No further patentable weight is given to the properties recited because they are not accompanied by any recitation of a further structural limitation to the composition. Accordingly, it is Examiner's position that the recited physical properties are rendered obvious by the combined references because a composition is inseparable from its properties.

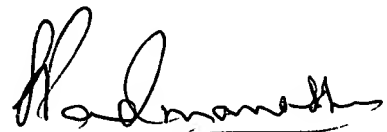
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W Mitchell whose telephone number is 571-272-2907. The examiner can normally be reached on M-F, 8:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gwm



**SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER**